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least will give an idea as to the scope of the work. The first lecture by M. A. Davaune is a charming historical discourse on the invention and application of Photography from Daguerre and Niepce to the present day.

Chronophotography, the study of moving bodies, is discussed by M. G. Demeny; Photography in Colors, by Prof. G. Lippmann, of the Faculty of Science of Paris; Astronomical Photography, by Prof. J. Janssen, Director of the Astronomical Observatory of Meudon, and Photographic Chemistry by M. C. Fabre. To enumerate rapidly the titles of other lectures we have: Medical Photography, Military Photography and Photocartography, Photogravure and Photochromography, the Photographic Objective, Photographic Processes, the Photography of Natural Phenomena, Iconometry and Metrophotography (sciences but little understood in this country but of the greatest importance), Microphotography, the Production of Panoramas, etc., etc.

The book is printed on heavy paper, and the typographic work is in excellent style. The illustrations in most cases are reproductions of photographs and while illustrating the text are in themselves works of art, adding a further charm to the volume.

NOTES AND NEWS.

THE impetus recently given to nature-study in the secondary schools has led to a demand for the more thorough preparation of teachers in the essentials of botany and zoölogy. Teachers cannot get special training in these branches during the college year, because it coincides with their teaching year. In the past their oppor-

tunities for getting it during summer have been limited, on account of the lack of summer schools. To meet this demand the New Hampshire College, coöperating with Superintendent Gowing, of the State Department of Public Instruction, will institute next July a summer school of biology, especially adapted to the needs of teachers in the secondary schools. The instruction in botany will be given by Principal Charles H. Clark, A.M., of Sanborn Seminary, Kingston, N. H.; and in zoölogy by Prof. Clarence M. Weed, D.Sc., of the college. Supplementary lectures will also be delivered by President Chas. S. Murkland, Ph.D., and Superintendent Fred Gowing, of Concord. The school will open Thursday, July 5, and continue until Saturday, Aug. 4. It will be held in the laboratories and class rooms of Thompson Hall, students being granted free use of the library, microscopes, aquaria, collections, and other facilities. The laboratory instruction will be supplemented by work in the field and class-room, and by informal discussions of such topics as are likely to prove useful for illustrative purposes in nature-study in the lower schools. The course of study will cover the line of work in botany and zoölogy recommended in the recent report of the Committee on Secondary School Studies, appointed by the National Educational Association for adoption by the secondary schools. In addition, there will be offered, to such teachers as may desire it, an opportunity of taking a special course in microscopical technique under Principal Clark, or in elementary entomology under Professor Weed. The situation of the college is peculiarly favorable to the study of natural history. Plants and animals inhabiting a great variety of land surface, as well as fresh, brackish, and salt water, are easily accessible.

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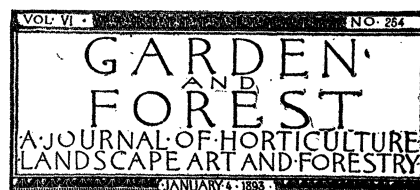
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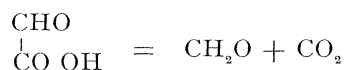
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—At the end of the article on "The Synthetical Powers of Micro-Organisms, I.," in *Science*, Jan. 19, 1894, the equation should read:



—The archæological researches in the southern part of the republic of Costa Rica, which are now conducted by Enrique Pittier, director of the Physico-geographic Institute at San José, in behalf of the government, have been fruitful in results. His explorations in the Terraba and Boruca portions of the Pacific slope were continued during several seasons and disclosed the fact that the Terraba Indians are not individuals of a homogeneous race, but a medley of several Costa Rican tribes gathered up and settled on the tracts which they now inhabit, during the course of the eighteenth century, by Franciscan missionaries. Among this assemblage of tribes the Terbis or Tervis, who formerly had their home on the northern coast, were prominent, and hence the whole colony of tribal remnants were comprehensively called Terbis or Terrabas. The dialect of the Terrabas was adopted by the rest of the colony Indians. In fact it does not differ greatly from the language of the Bribris and other tribes still extant on the Atlantic side of the Costa Rican cordillera. Another people cognate to the Terraba are the Boruca or Brunka, now living three

leagues south of the above. On their trading expeditions they sometimes visit San José, the capital, and from their homes they reach it in eleven days. They are not communicative concerning their own vernacular, and H. Pittier experienced considerable difficulty in getting collections of Boruca terms and phraseology. In appearance they differ from the Terrabas and are of purer and more homogeneous extraction, as may be readily guessed from what was said previously about the formation of the Terraba settlements.

—The executive committee of the Association of Official Agricultural Chemists has decided to call the annual meeting of the Association for August 23, 24 and 25, 1894. The meetings will be held in the lecture room of the National Museum at Washington, beginning at ten o'clock on Thursday, August 23. The reporters for the meeting are as follows: Phosphoric acid, B. W. Kilgore, Raleigh, N. C.; Nitrogen, J. M. Bartlett, Orono, Me.; Potash, H. J. Wheeler, Kingston, R. I.; Soils and ash, A. M. Peter, Lexington, Ky.; Dairy products, E. H. Farrington, Champaign, Ill.; Foods and feeding stuffs, H. J. Patterson, College Park, Md.; Fermented liquors, Geo. F. Colby, Berkeley, Cal.; Sugar, G. L. Spencer, Washington, D. C. The coöperation of European chemists has been invited in the analytical work, and several acceptances of the invitation have been received. It is urged upon all members who have communications to make to the Association to bring them properly prepared and ready for printing. Much delay has arisen heretofore in securing the manuscript promptly from the reporters and others presenting papers. The speedy publication of the proceedings will be greatly facilitated by bringing everything properly prepared.

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FOR SALE.—A small collection of bird skins, consisting of 135 specimens of New England species, most of which are in good condition and all have full data. Nearly all were collected in the Connecticut valley in Massachusetts. Price, \$10. Address, H. L. Clark, 3922 Fifth Avenue, Pittsburgh, Penna.

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WE are engaged in a study of the geographical distribution and osteology of our North American Box Turtles or *Terrapene (Cistuda)*. Specimens from Georgia, Tennessee, Alabama and the Dakotas are especially desired. Material from other localities would be welcomed. Would gladly pay postage and return specimens if desirable. Specimens should be enclosed in a small box with little paper (without alcohol) and addressed, W. E. Taylor, Walker Museum, University of Chicago, Chicago, Ill.

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